

prepared and updated (see Fig. 31). When selecting the gradation display, a color bar is simultaneously prepared. Data of this color bar is also transferred to the video memory 11A together with the prepared image, and displayed. When selecting the threshold value display, a 5 threshold value setting slider bar (see Fig. 31) can be operated to instruct for portions exceeding the threshold value specified with this bar to become red in color. The parametric image preparing section 11O prepares image data so that the surface color changes in response to this, which is transferred to the video memory 11A and displayed on the 10 monitor 13.

<D. Volume data display operation>

In response to operator's selection, the function of the volume data display preparing section 11Q is activated, and prepares a projected image such as an MPR image or an MIP image of the volume image data, 15 or a volume-rendering image. Data resulting from superposition of a graphic showing the sectional position of the currently displayed perpendicular view on the thus prepared image is prepared, and displayed on the monitor 13 via writing into the video memory 11A.

According to this embodiment, as described above, the operator 20 can easily perform correction of the contour of the tubular structure area extended for quantitative analysis. He (she) can determine the image display position by comparing the stenosis ratios of tubular structures such as blood vessels. Since an area to be analyzed is cut and a three-dimensional image thereof is displaced, a higher-speed data 25 processing is ensured.

On the other hand, image display at the target position can be automatically accomplished from the stenosis ratio, sectional area in